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A concise easily digested periodic analysis based upon scientific research in real estate fundamentals and trends. Constantly measuring and reporting the basic economic factors responsible for changes in trends and values.....Current Studies.... Surveys....Forecasts

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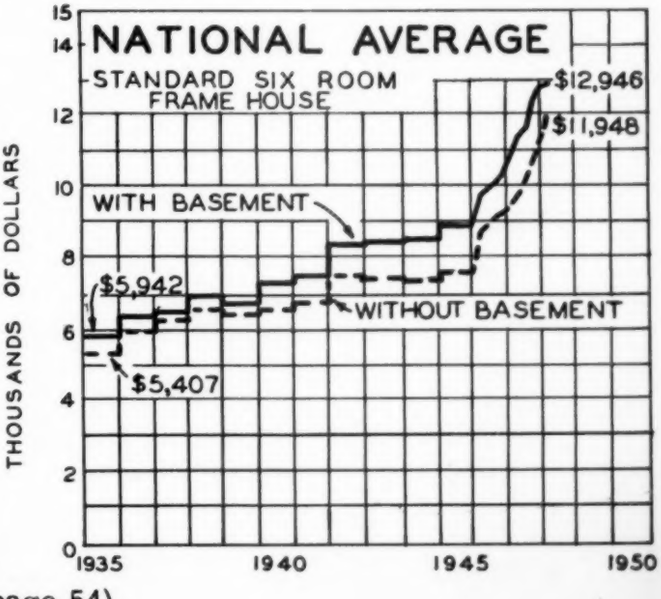
REAL ESTATE ECONOMISTS, APPRAISERS AND COUNSELORS

WHAT DOES A HOUSE COST?

WHAT does a house cost? Speaking figuratively, it depends on what you buy it with. If you use dollars, our six-room frame house costs about $13,700. If you use hogs, the cost is around 284; steers, 60 to 65. If you decide to shell out corn instead of dollars, it will cost you about 6200 bushels.

In more conventional terms all of this means that the farmer has made more spectacular economic gains than any other large group in the country. From a depression low of 30¢ a bushel, the price of corn advanced to 9 times that figure, hogs advanced to over 7 times their 1932 price, and cattle moved from a 1933 price of $5.42 to $30, a 5 and one-half fold increase. While all of this has been going on, construction costs have increased to about 3 and one-half times their 1932 figure. Look at page 57. The charts show the cost of our standard six-room frame house in dollars, in three farm products and in hours of labor of workers in four major industries. The figures for the farm products charts were arrived at by dividing the dollar cost of the house by the wholesale price of a 200-pound hog, an 800-pound steer and a bushel of corn. The figures for the charts on hours of labor were arrived at by dividing the cost of the house by the average hourly wage paid in each of the four major industries.

The significant thing about these charts is the manner in which the price farmers have to pay for housing fluctuates in contrast to the relatively stable price labor pays.



For the past several years the farmer has been better off than any other large economic group in the country. Despite the break in the commodity and livestock markets, he still is and probably will continue to be for many months to come.

It is true that labor's gains have not kept pace with those of the farmers. On the other hand, while they have been playing hare with the cost of living hound, labor has managed to keep out in front, and while steadily employed (see Business Analyst, Volume XVI, No. 57, December 26, 1947,

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WHAT DOES A HOUSE COST?

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page 482), its purchasing power has never suffered the same swift, violent attrition that the farmers felt from 1919 to 1923, or from 1929 to 1932.

The table below shows how labor's present ability to buy housing compares with its ability in 1920.

	Number of Hours Necessary to Buy Standard Six-room Frame House and Lot			
	1920 - $9,200	1939 - $7,400	Nov. 1947 - $15,100	Hours Difference Between 1920 and 1947
Bituminous coal miner	10,800	8,300	8,160	-2,640
Steel worker	12,250	9,625	10,250	-2,000
Auto worker	14,400	7,950	9,800	-4,600
Construction worker	12,200	6,870	8,680	-3,520

On pages 58 through 61 we show the construction costs of our six-room frame house in fifty-two different cities compared with the national average. In gathering the data necessary to compile these cost figures we found that the "spotty" condition of lumber prices prevalent in St. Louis extended to most sections of the country.

Nearly all of us have a pretty good idea as to the reason construction costs are high. One reason for high construction costs that is frequently not mentioned is the public's ability and willingness to buy. We know that in addition to very high demand for housing, material costs are higher than ever before and that labor's wages and labor's efficiency have followed opposite courses for quite some time.

The housing industry has been under heavy fire from the government, labor, and the veterans' groups for many months for its failure to supply "low-cost" housing. With all other phases of our economy at record or near-record peaks, it is not logical to attempt to harangue the housing industry into producing a low-cost product.

The following table compares the increases in construction costs since 1939 with the increases of other items over the same period:

	Increase since 1939
Construction cost of 6-room frame house in St. Louis	132%
Labor cost on 6-room frame house in St. Louis	159
Materials on 6-room frame house in St. Louis	117
Retail food prices in St. Louis	124
Clothing prices	85
Manufacturing wages (average weekly earnings)	114
Wages in retail outlets (average weekly earnings)	77

Most of the criticism leveled at the industry has been directed against labor's

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inefficiency, high prices of materials, unreasonable profits for builders, and "make work" policies followed by unions or present in archaic building codes.

Our research on labor's inefficiency has produced no concrete figure. Some contractors report 50 per cent inefficiency, while others report labor just about on a par with prewar. One reports that his bricklayers are putting down 300 bricks a day, while another reports 1000 a day. In all fairness to the building tradesmen on the job today, the following should be considered.

Many of the comparisons made today are on different types of work. The workers in most of the trades are slowed down by age or lack of experience, and much standing around "inefficiency" is caused by slow material delivery.

Our opinion in the matter is that labor's inefficiency varies not only from man to man, job to job, and city to city, but also from day to day; that over-all (a guess) it is about 20 per cent compared with prewar standards, and that it is improving gradually. Topnotch efficiency will not be reached in building construction or any other industry as long as a worker can walk off of one job today and take another tomorrow, but it will continue to improve slowly.

Building material prices are discussed in another section of this report.

The profiteering of building contractors is mostly fiction. There are some profiteers in the contracting game just as in all other lines of business, but most of them are figments of the government's imagination or results of uninformed public opinion which holds that a five-room house should still sell for $5,000.

Contractors have had to protect themselves against jumps in material prices and wage scales. They must guard against having money tied up in projects halted by slow material deliveries. The profit should be commensurate with the risk. Sometimes it is more so - frequently it is not. As the material situation improves (and it is, slowly) and as labor settles down, the contractor will be able to set his feet a little more firmly on the ground and true competition will come back to the industry.

In the case of "make work" practices, trade restrictions, and outmoded building codes, there are few, if any, extenuating circumstances. This is probably the one indictment that could be made to stand up against the various groups making up the industry, although it would apply to the minority of the individuals. The Joint Committee on Housing has just issued a report "The High Cost of Housing," in which it states:

> "Because of a Supreme Court ruling, hod carriers can prohibit the use of ready-mixed concrete; electrical workers can refuse to install ready-made equipment until the wiring is ripped out and put in again; builders can be denied the use of mail-order-house plumbing; spray-gun painting can be prohibited. The list could be extended ..., but the point is this: The Henry Fords of housing cannot get started as long as the law gives, in effect, immunity to organized drives to preserve obsolete methods and prevent mass production.

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BUILDING COST - PAST, PRESENT AND FUTURE

IN analyzing present high building costs and attempting to forecast their future course, a look at the past may be helpful. The chart on page 67, "Principal Components of Building Costs for the Last 150 Years," shows four major peaks in wholesale building material prices and in lumber prices since 1795.

One peculiar characteristic of building material and lumber prices is that while they rise to great heights during boom periods, their subsequent decline seldom drops them to their pre-boom level.

The following table illustrates this point and shows what our "construction dollar" used to buy:

COSTS — 6-ROOM FRAME HOUSE

Year	Rough Lumber	Building Materials, Excluding Plumbing, Heating & Electrical	Labor, Excluding Plumbers, Steamfitters & Electricians
1795	--	$ 840	--
1800	$ 47	800	--
1815	70	1,100	--
1824	49	700	$ 240
1860	89	935	330
1866	168	1,840	500
1877	104	1,025	500
1896	110	1,000	550
1900	132	1,210	610
1915	186	1,420	860
1920	610	3,950	1,830
1932	225	1,900	1,650
1947	1,028	5,380	3,550

Going back a bit farther to 1771 in Norfolk, England, we find that a four-room stone cottage containing 4780 cubic feet cost $200 to build (4.2¢ per cubic foot) and rented for $16 per year. (This cost is 12-1/2 times the annual rent compared with the "10 times the annual rent" ratio as widely used in this country before rent control.)

Building materials and lumber prices also tend to rise by a greater percentage each boom than they did during the preceding boom. Lumber in 1815 reached a point 58 per cent above its preceding low point. Its rise to the 1866 peak represented a gain of 140 per cent. From the 1900 low to its 1920 high represented a rise of 370 per cent, and the present level is 410 per cent above the 1932 low.

The underlying causes for the drop in the grain and livestock markets do not apply to building material prices now.

Therefore we cannot expect the same sort of relief. About the only effect that the grain drop will have on building material prices lies in the possibility of some

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WHAT DOES A HOUSE COST ?

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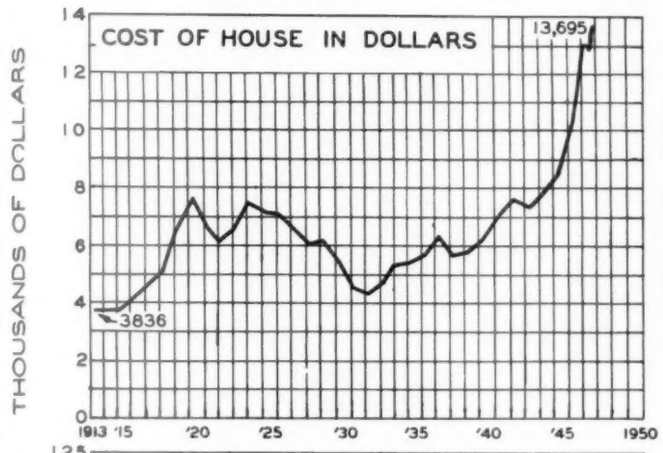

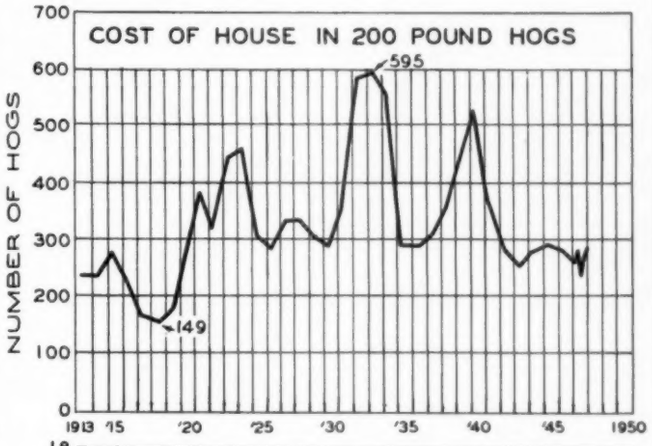

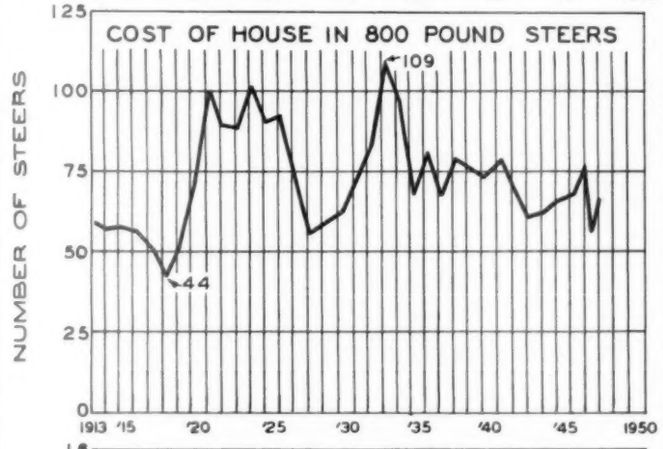

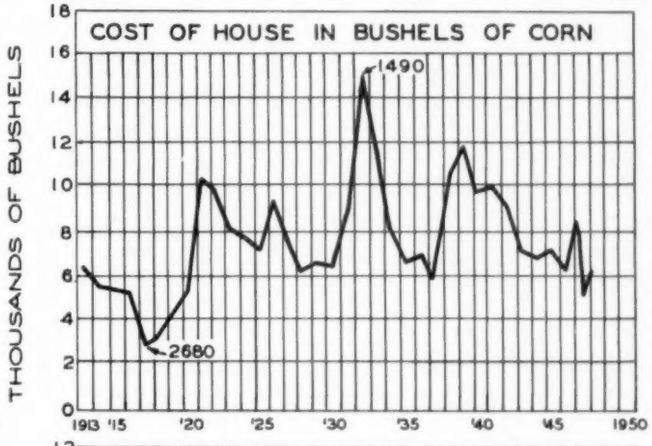

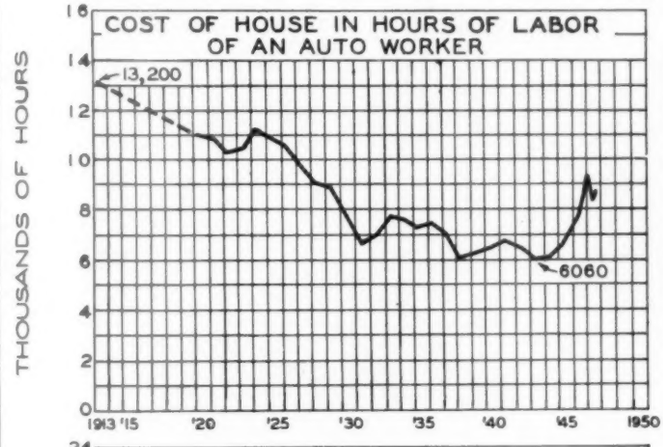

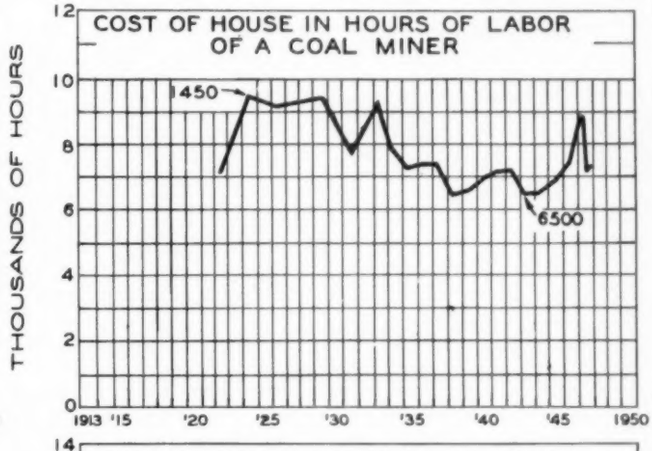

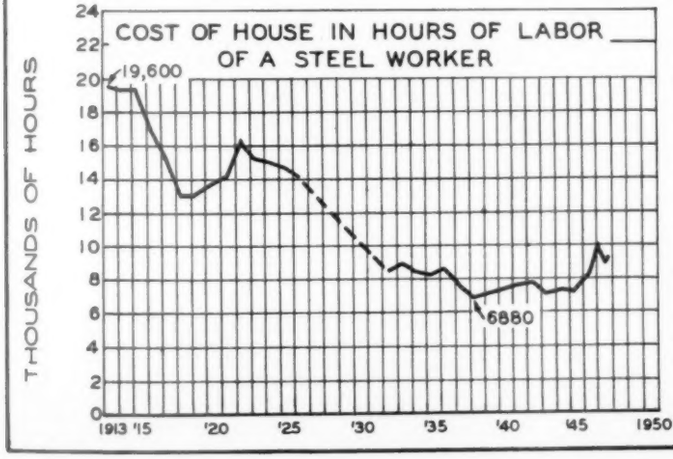

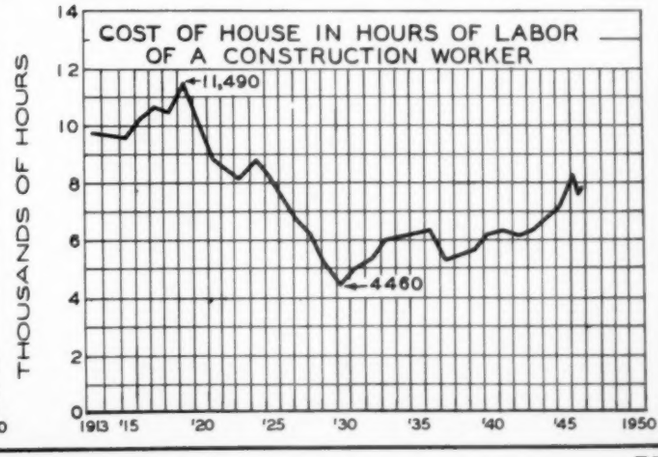

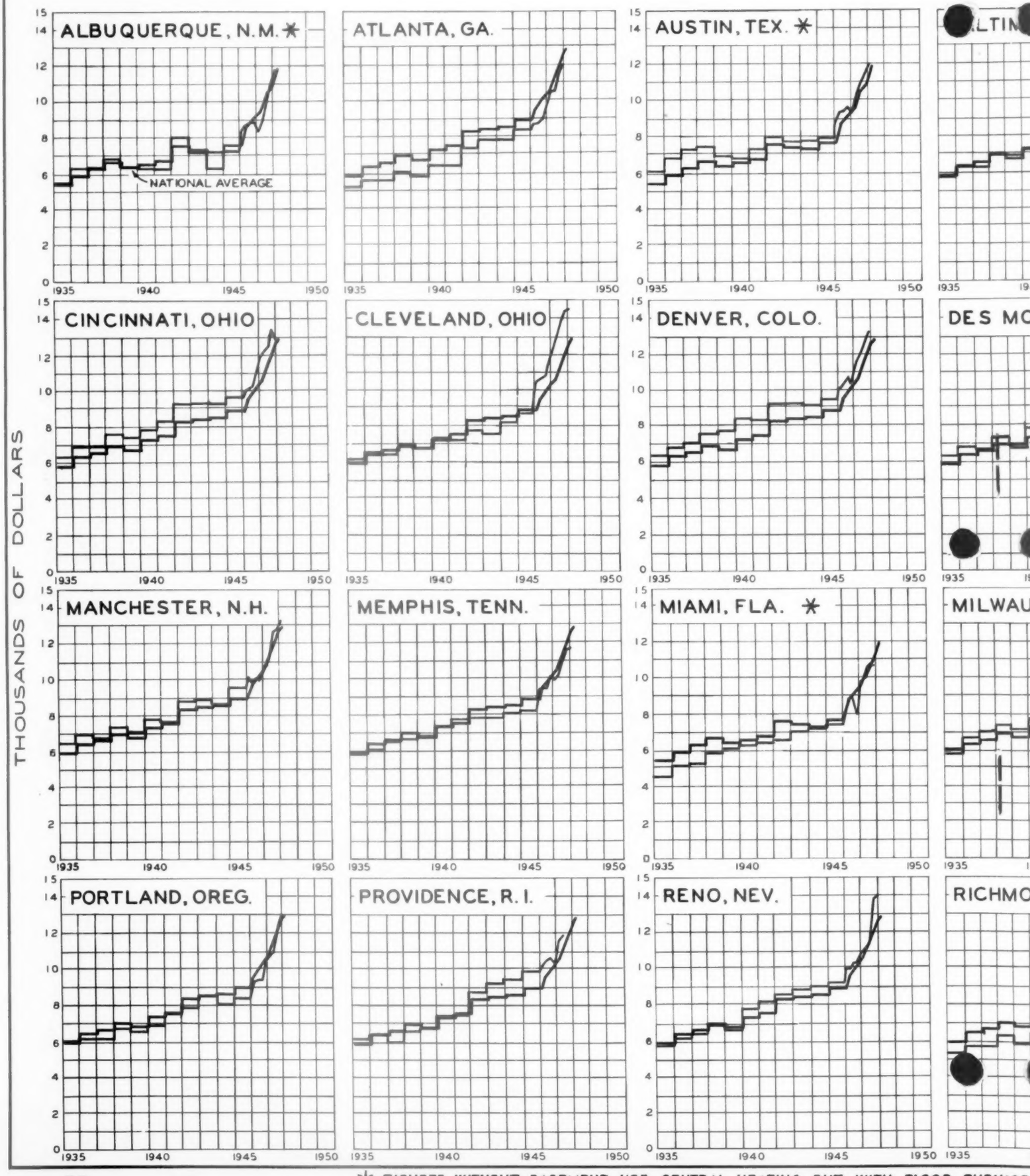

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TOTAL CONSTRUCTION COSTS OF A STANDARD SIX

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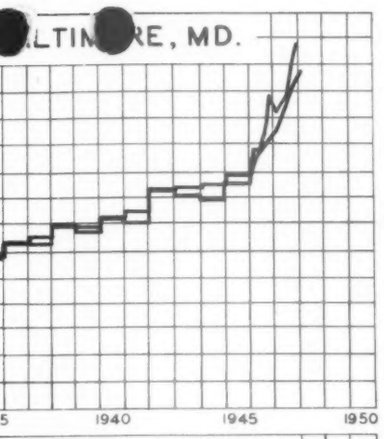

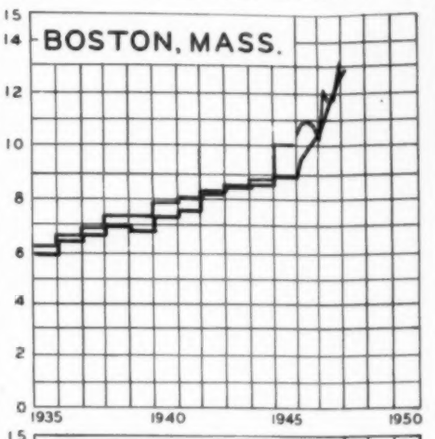

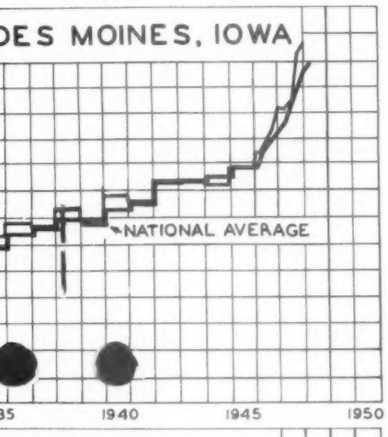

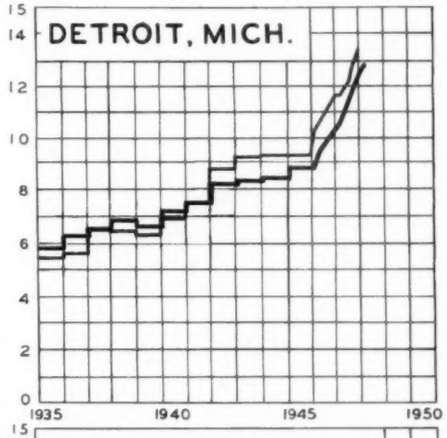

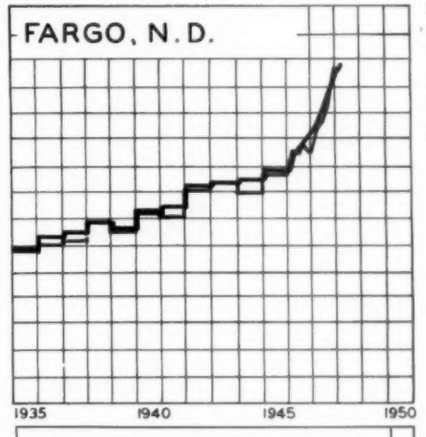

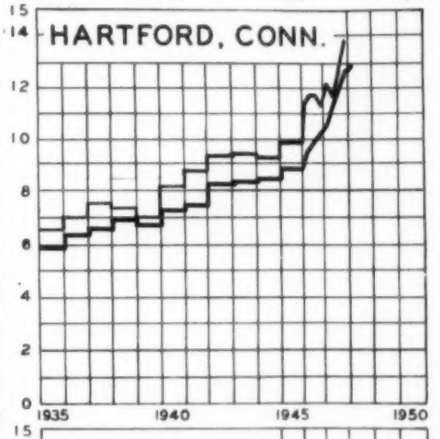

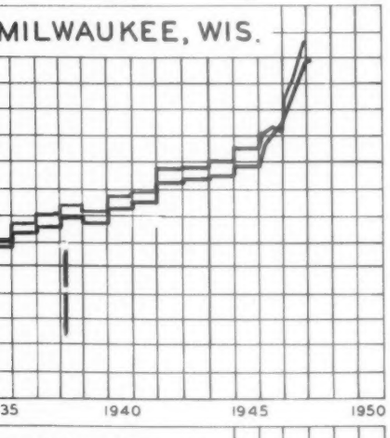

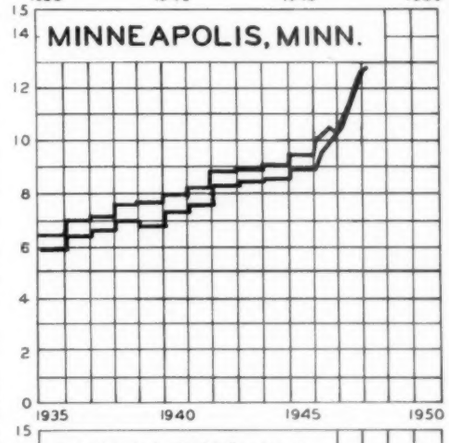

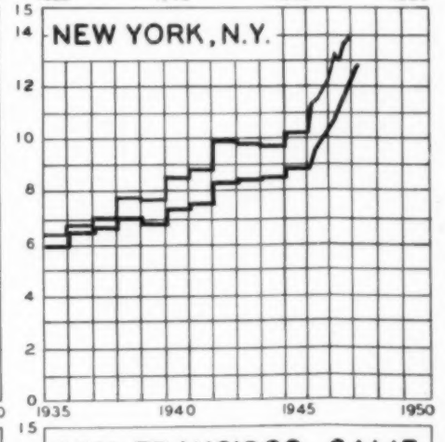

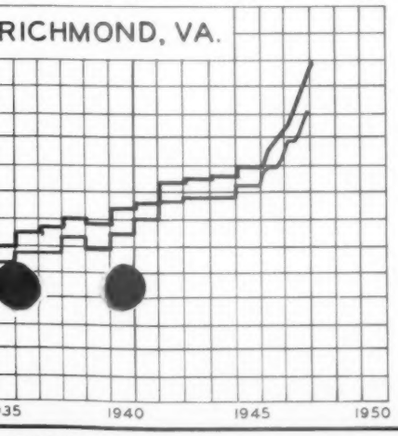

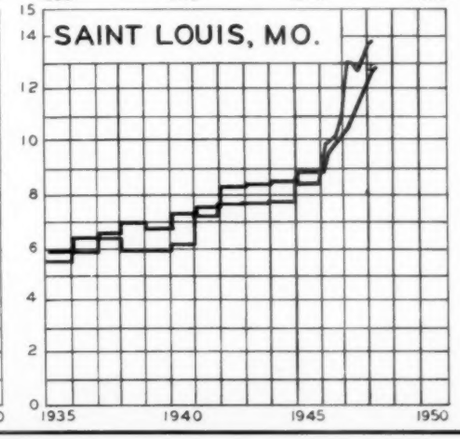

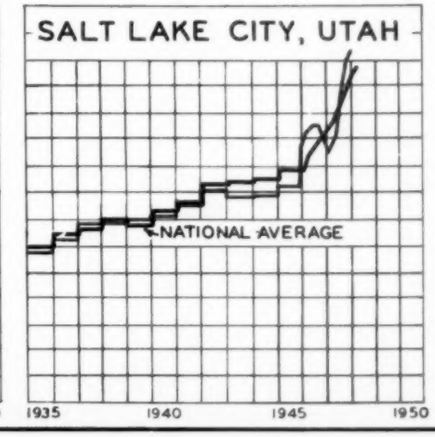

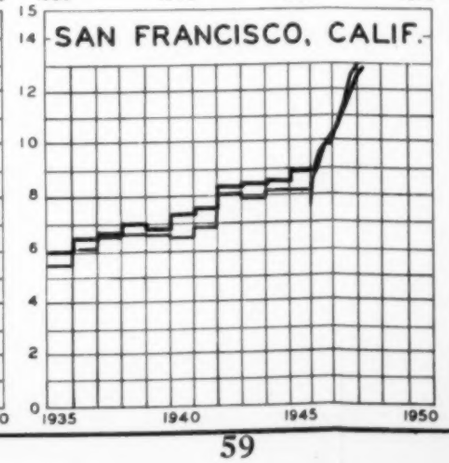

SIX ROOM FRAME HOUSE BY CITIES

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UNION WAGE RATES USE
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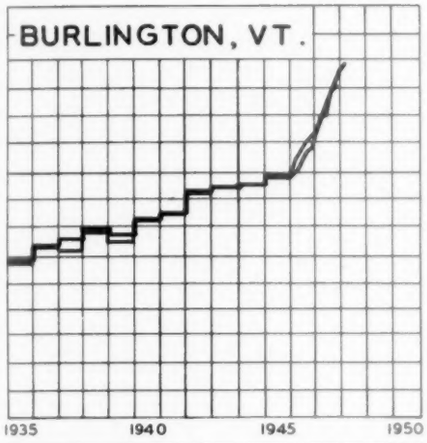
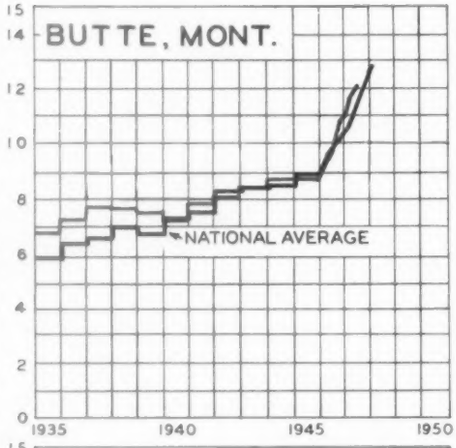
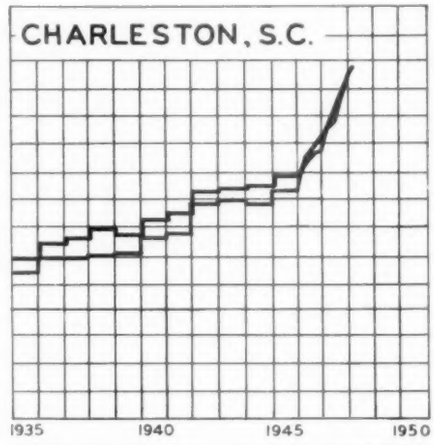
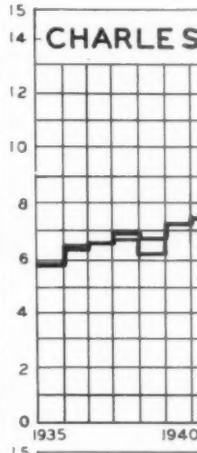
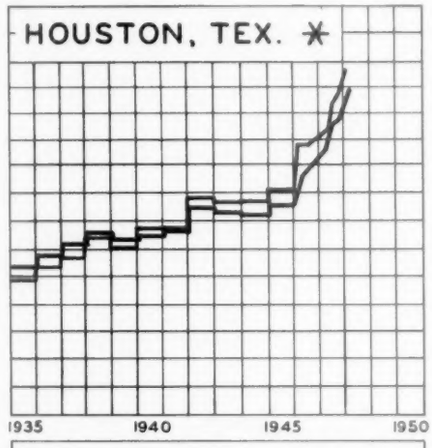
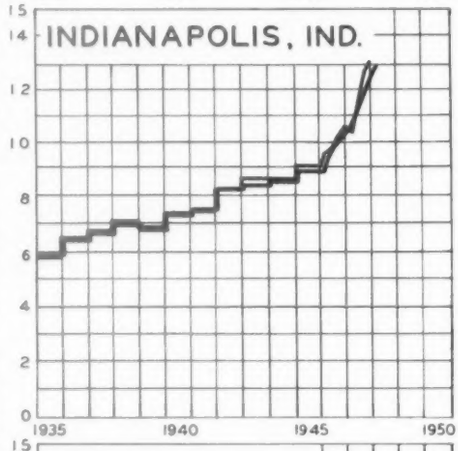


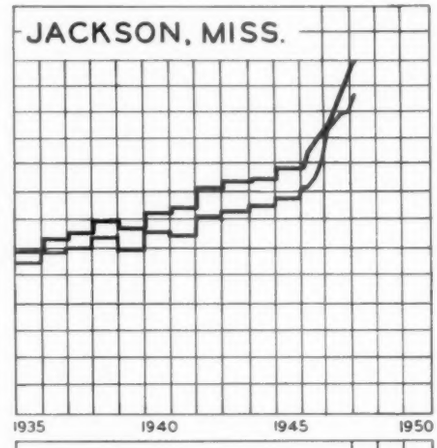


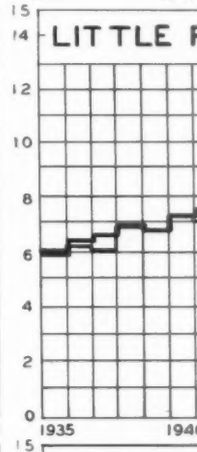


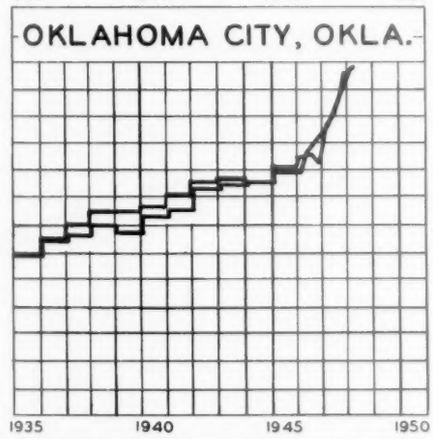


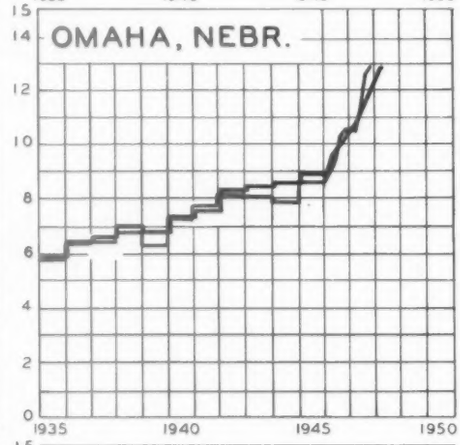


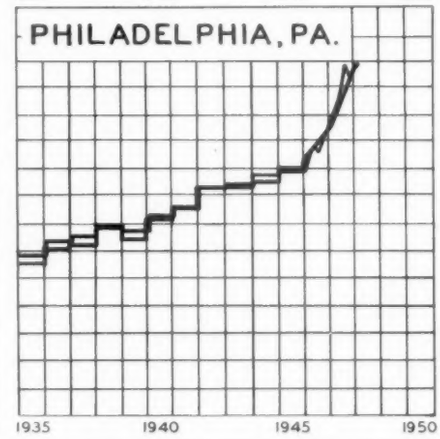


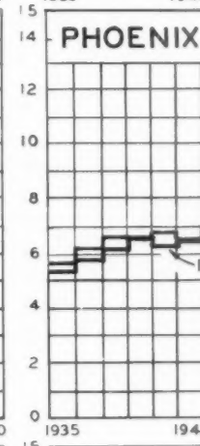


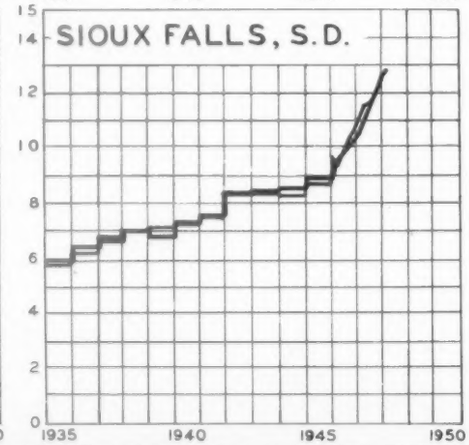


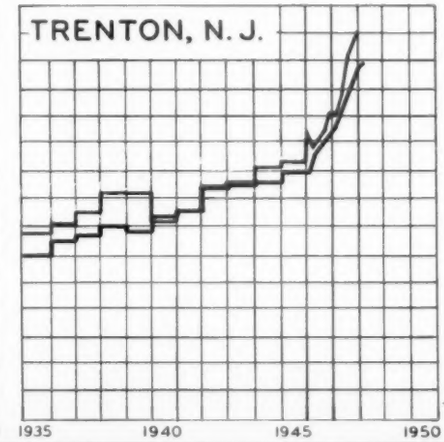


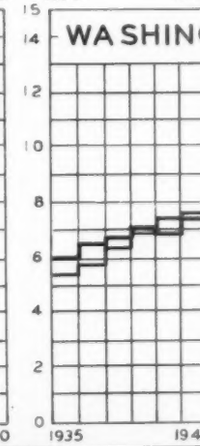




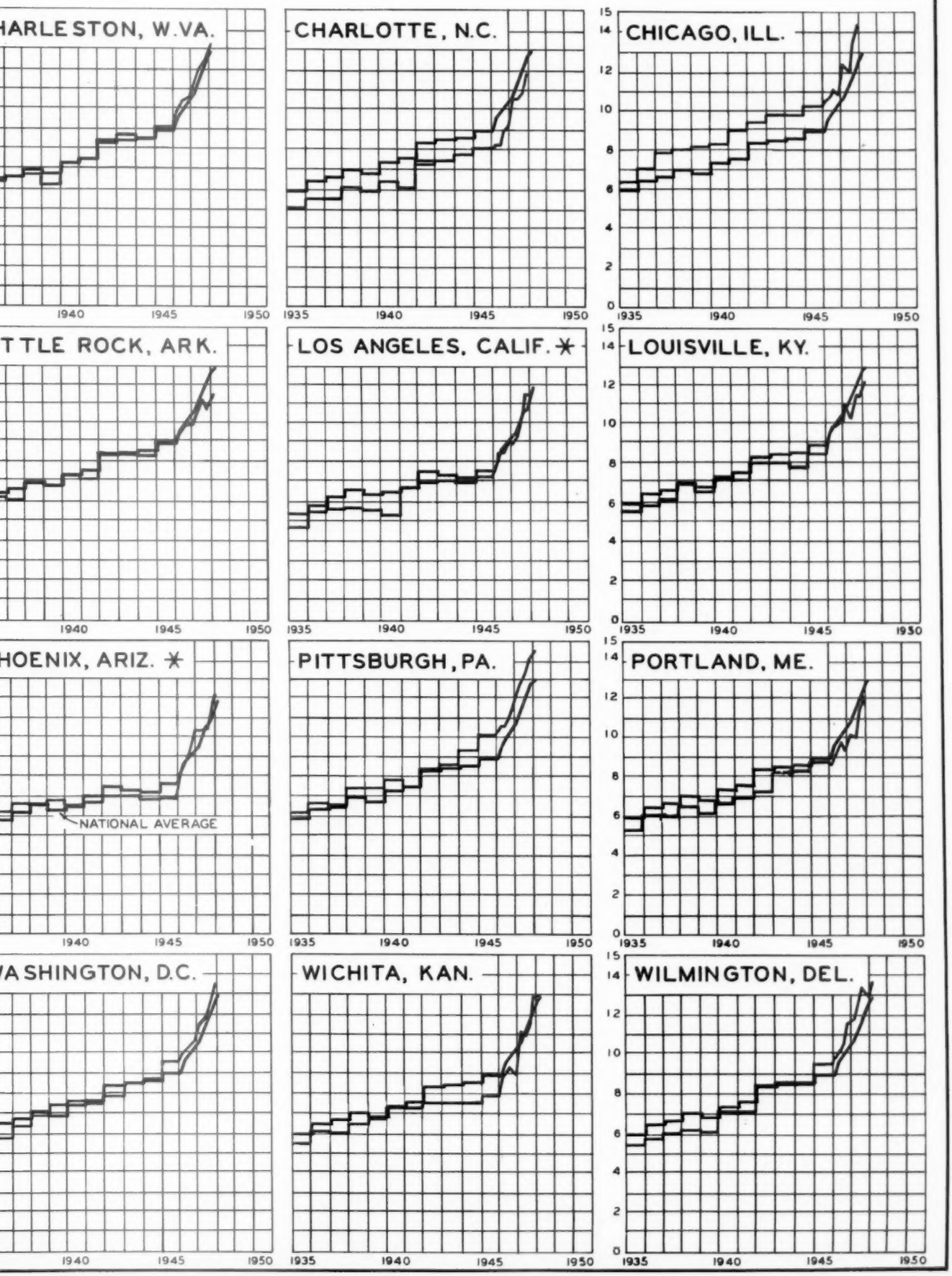








GE RATES USED IN THESE CALCULATIONS THROUGHOUT. APPRECIATE IT IF CLIENTS CAN SEND US ACTUAL AID TO CARPENTERS, MASONS, AND COMMON LABOR IN THEIR CITIES DURING 1935 TO 1940, OR ANY PORTION OF THAT PERIOD. THE UNION WAGE LEVEL PROBABLY MAKES THE COST IN MANY OF THESE CITIES TOO HIGH DURING THE EARLIER YEARS.



REAL ESTATE TRANSFERS IN PRINCIPAL CITIES

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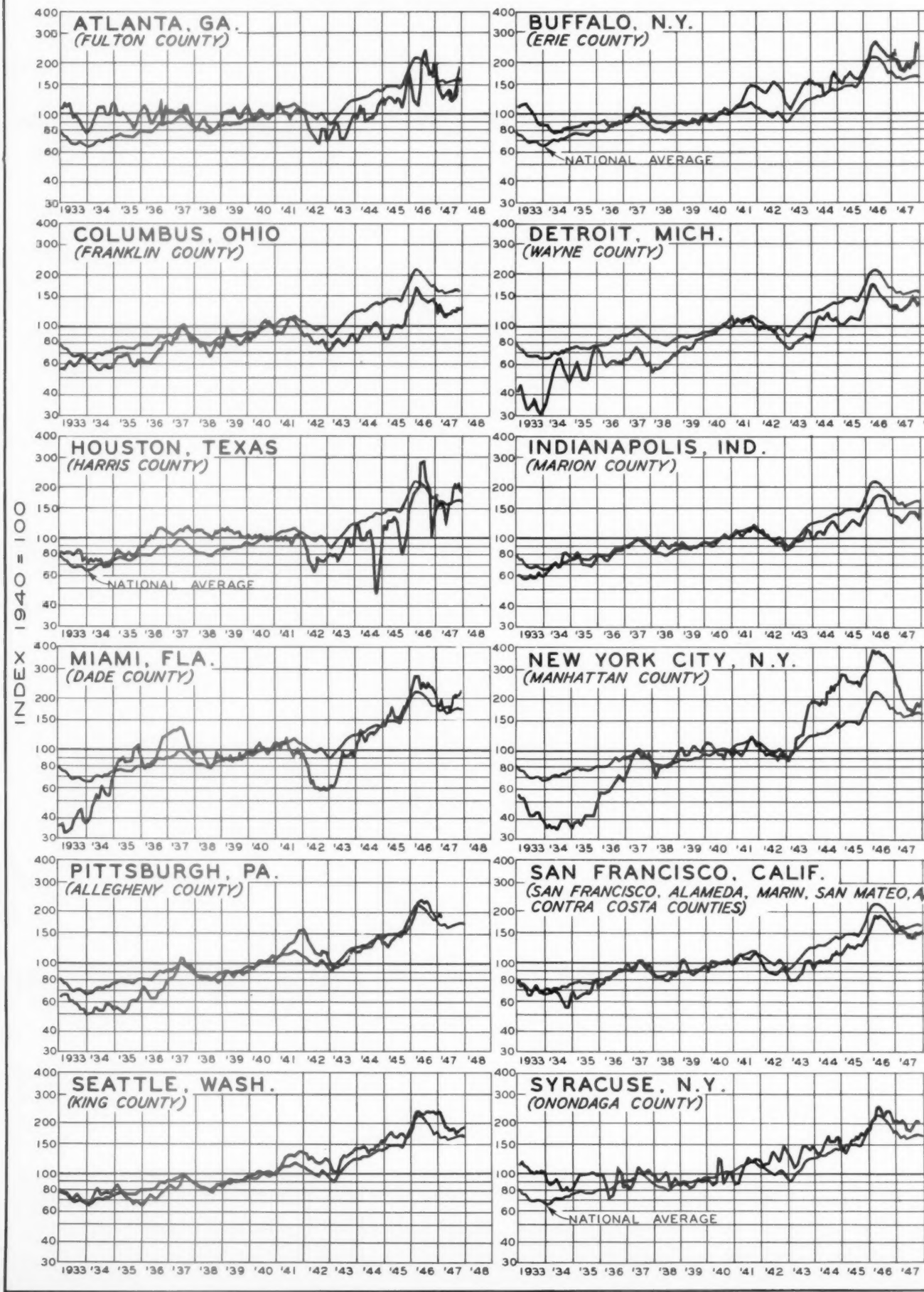

REAL ESTATE TRANSFERS IN PRINCIPAL CITIES

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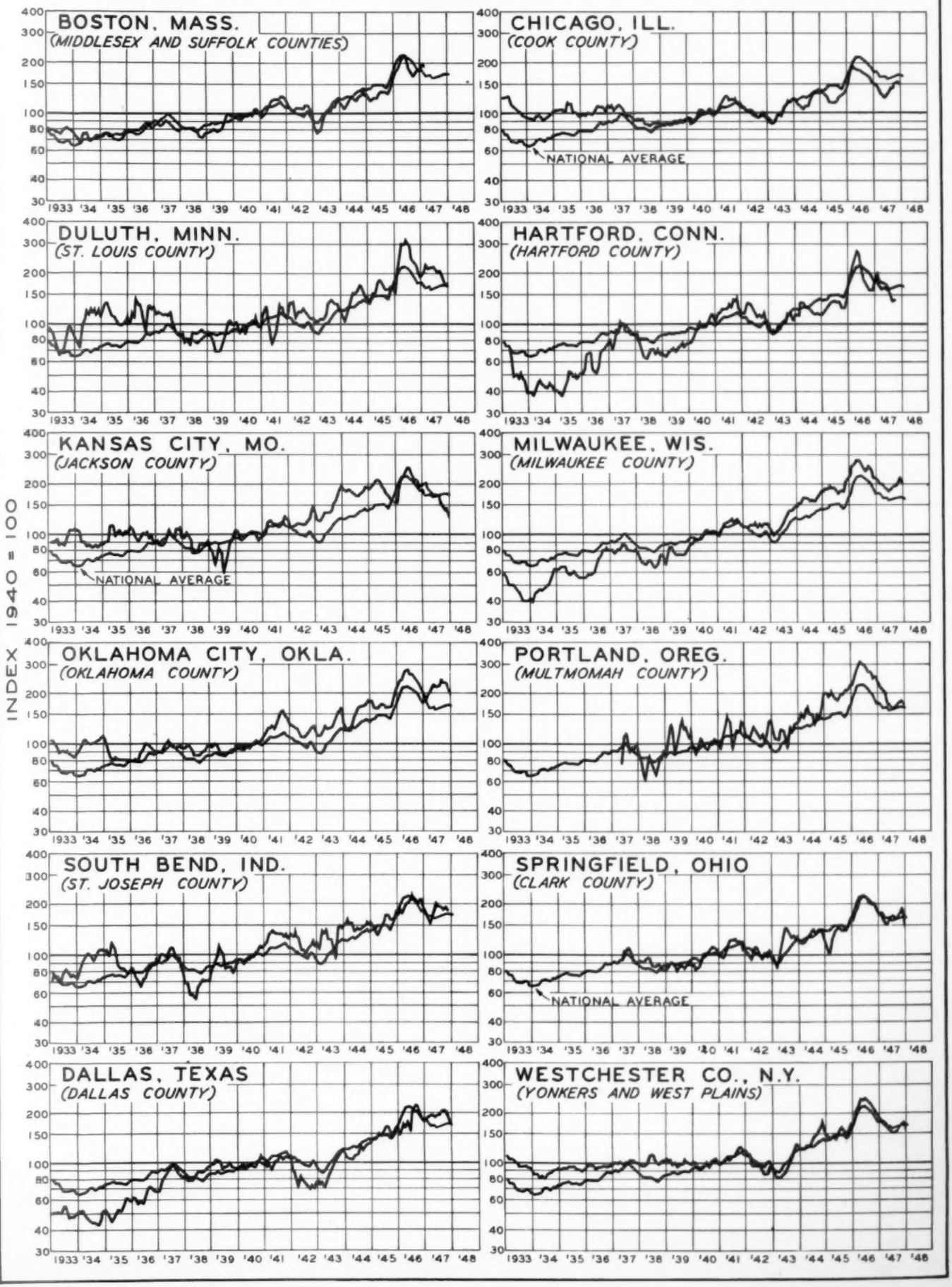

REAL ESTATE TRANSFERS IN PRINCIPAL CITIES

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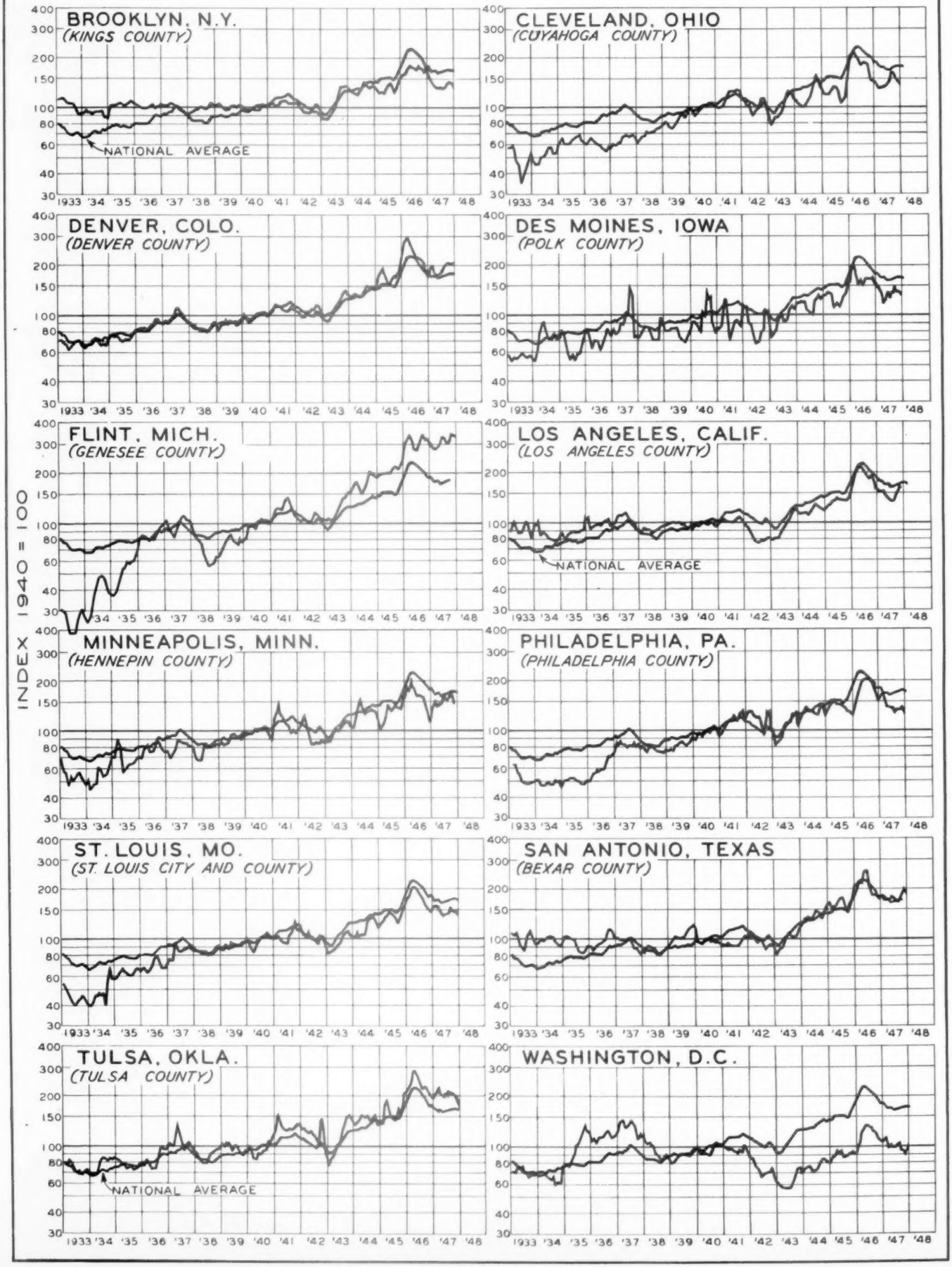


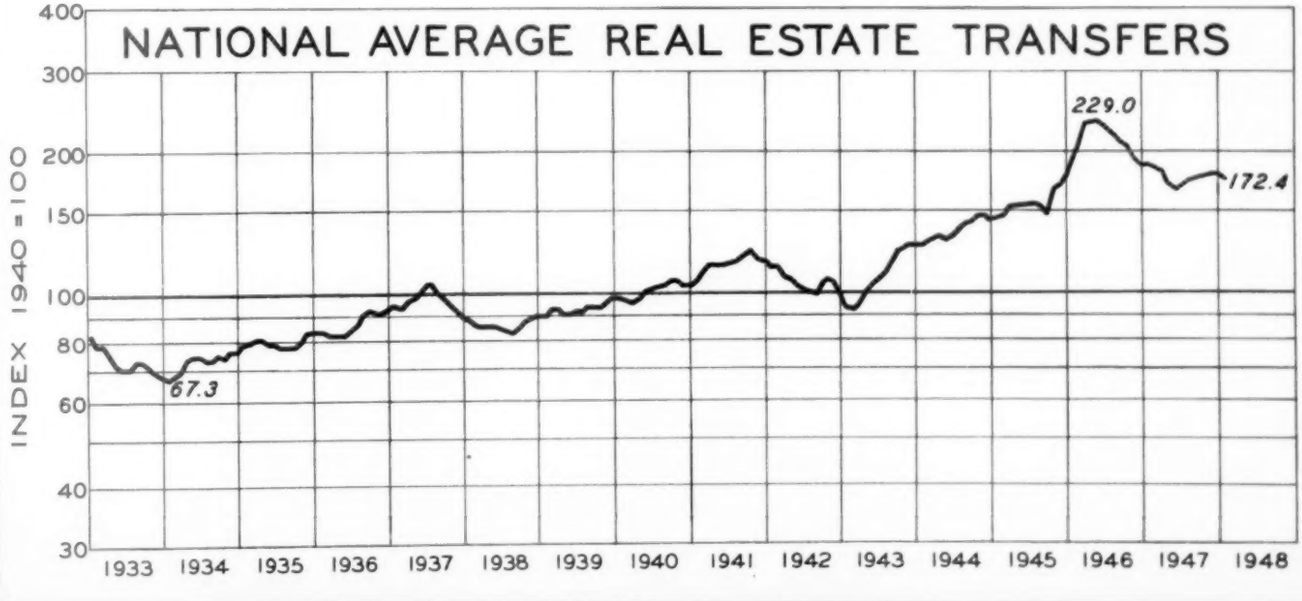
REAL ESTATE ACTIVITY IN 36 CITIES

IN March 1935 we published the first national real estate activity chart ever printed in any country, so far as we know. The chart was based on real estate activity in 24 cities of the United States from 1916 through March 1935. Since then we have widened our base to include 36 cities and have tentative swings outlined as far as 1795.

Compilation of real estate statistics on a national basis is made rather difficult by the fact that various localities follow different procedures in record keeping. In some areas, most sales are made on a contract basis and title does not pass until several years after the property is transferred. Other communities transfer cemetery lots by warranty deed, and if care is not taken these sales will be mixed in with the regular transfer figures from that locality. A few cities attempt to post the sales price along with the record of the sale, and others post the assessed value of the property with the record of its transfer. Needless to say, some cities have their real estate records segregated much better than others. Although difficult to compile, real estate statistics are probably more reliable than those of any other industry because they are completely unbiased and, in most cases, are available for such a long period of time.

Close study of real estate activity is of benefit to practically every business man. If the cycle operated independently of other economic trends, it would be of little use except to people interested in real estate. It has been found, however, that the real estate cycle is actually a harbinger of good and bad times, and that many other important business indexes follow it quite closely. (Mortgage activity, construction activity and production of capital goods are three that do.) It is interesting to note how the real estate cycle has "forecast" our major depressions, sometimes two or three years in advance.

The activity figures for the 36 cities represented in the charts on pages 62 through 64 include all voluntary transfers made in the county in which each city is located. Since each city has its own index, the cities are not comparable on a quantitative basis. The trends shown, however, are comparable not only with one another, but with the national average, which is represented on each chart by the red line.



WHAT DOES A HOUSE COST?
(cont. from page 55)

> "...A house is a tangle of goods and services, all contributing to block mass production; it is hard to say which is the worst obstacle, because the situation differs in different cities. Some building-material producers fix prices either through private arrangements or through trade associations. The patent racket is widely used within the industry; patents are used to control prices and sales methods, to limit the amount of certain products, and to gain control of unpatented products. Some material distributors try to raise the price of their services by secretly agreeing on price mark-ups; others try to make sure that all business passes through their hands and that no new methods are introduced on which they can make no overcharge.
>
> "Their weapon has been the boycott. Some manufacturers have had to pay the distributor a commission even when the customer bought direct from the manufacturer."

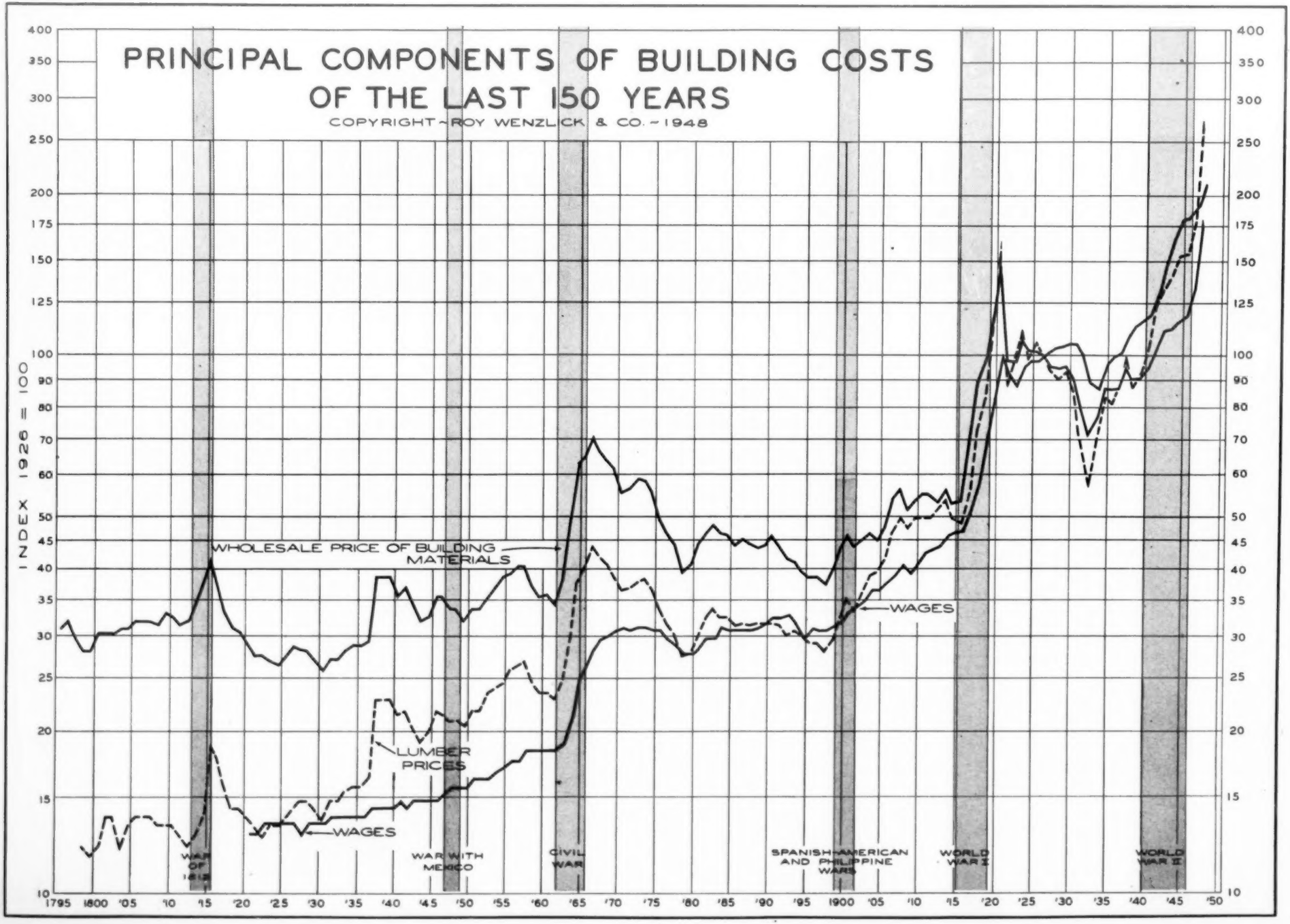
The entire industry needs revamping, particularly the materials distribution system, the building codes, the work agreements between the unions and the contractors, and the design and fabrication of the product. To accomplish this will take many years. The industry is by far the largest in the country, perhaps the largest in the world. It reaches into every village and hamlet, nook and cranny of the country. Its operation is so monstrously inefficient from the standpoint of speed and economy that it seems to have been "misorganized" rather than organized. Like Topsy, it "just growed up." But it's still in short pants.

BUILDING COSTS - PAST, PRESENT AND FUTURE
(cont. from page 56)

farmers having a lower income this year and, therefore, deferring or abandoning plans for new buildings. This would cause some slackening in demand for building materials with the probability of a price drop. A forecaster is bound to get lost in this maze of possibilities, and we believe that the drop in building material prices, if any, is much more likely to come from some direct change in their supply or the demand for them. If credit continues to tighten, making home financing more difficult, some of the zip will be taken out of the housing boom. When this happens, the shrinking demand is bound to chop down the prices of lumber and building materials. Last September we said that we thought their peak had been reached. Since then they have increased - lumber, 5 per cent, and building materials, 3-1/2 per cent.

Lumber and building material supplies are slowly improving. They will probably be able to keep pace with any increase in demand during the balance of the boom. They have already risen more than ever before. For these reasons we think that they will soon top out and start down.

We expect these prices to level off by mid-year and to show a downward trend before 1949.


PRINCIPAL COMPONENTS OF BUILDING COSTS
OF THE LAST 150 YEARS
COPYRIGHT ~ ROY WENZLICK & CO. ~ 1948
INDEX 1926 = 100
WHOLESALE PRICE OF BUILDING MATERIALS
WAGES
LUMBER PRICES
WAGES
WAR OF 1812
WAR WITH MEXICO
CIVIL WAR
SPANISH-AMERICAN AND PHILIPPINE WARS
WORLD WAR I
WORLD WAR II

ESTIMATED NUMBER OF NEW NONFARM DWELLING UNITS STARTED

1900 - 240,000	1907 - 440,000	1914 - 445,000	1921 - 449,000	1928 - 753,000	1935 - 221,000	1942 - 496,600
1901 - 340,000	1908 - 440,000	1915 - 475,000	1922 - 716,000	1929 - 509,000	1936 - 319,000	1943 - 350,000
1902 - 360,000	1909 - 580,000	1916 - 480,000	1923 - 871,000	1930 - 330,000	1937 - 336,000	1944 - 169,000
1903 - 400,000	1910 - 475,000	1917 - 230,000	1924 - 893,000	1931 - 254,000	1938 - 406,000	1945 - 225,000
1904 - 440,000	1911 - 480,000	1918 - 120,000	1925 - 937,000	1932 - 134,000	1939 - 515,000	1946 - 670,500
1905 - 480,000	1912 - 490,000	1919 - 330,000	1926 - 849,000	1933 - 93,000	1940 - 602,500	1947 - 854,600
1906 - 480,000	1913 - 455,000	1920 - 247,000	1927 - 810,000	1934 - 126,000	1941 - 715,200	1948

MONTHLY FIGURES

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1939	32,300	30,700	42,900	42,900	53,300	45,900	44,200	51,200	42,400	42,900	45,100	41,200
1940	25,700	36,900	46,000	62,900	57,000	44,100	57,600	55,800	58,400	66,200	44,900	47,000
1941	41,200	43,700	60,200	75,200	70,700	77,200	74,600	69,800	67,000	56,200	46,600	32,800
1942	34,500	51,300	52,700	59,700	60,600	46,300	26,700	27,500	40,400	32,200	30,400	34,300
1943	45,000	40,100	33,000	26,700	33,600	21,800	24,200	27,600	24,300	28,100	26,100	19,500
1944	17,300	13,500	18,100	14,300	16,500	17,500	14,500	12,800	11,300	10,800	11,600	10,800
1945	7,600	8,400	12,300	18,300	16,900	20,300	20,100	17,100	17,900	25,400	30,500	30,200
1946	37,500	42,400	62,000	67,000	67,100	64,100	62,600	65,400	57,600	57,800	47,700	39,300
1947	40,100	44,100	58,400	68,700	72,500	77,200	80,100	85,700	92,000	93,800	80,000	62,000
1948	50,000											

CUMULATIVE FIGURES

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1939	32,300	63,000	105,900	148,800	202,100	248,000	292,200	343,400	385,800	428,700	473,800	515,000
1940	25,700	62,600	108,600	171,500	228,500	272,600	330,200	386,000	444,400	510,600	555,500	602,500
1941	41,200	84,900	145,100	220,300	291,000	368,200	442,800	512,600	579,600	635,800	682,400	715,200
1942	34,500	85,800	138,500	198,200	258,800	305,100	331,800	359,300	399,700	431,900	462,300	496,600
1943	45,000	85,100	118,100	144,800	178,400	200,200	224,400	252,000	276,300	304,400	330,500	350,000
1944	17,300	30,800	48,900	63,200	79,700	97,200	111,700	124,500	135,800	146,600	158,200	169,000
1945	7,600	16,000	28,300	46,600	63,500	83,800	103,900	121,000	138,900	164,300	194,800	225,000
1946	37,500	79,900	141,900	208,900	276,000	340,100	402,700	468,100	525,700	583,500	631,200	670,500
1947	40,100	84,200	142,600	211,300	283,800	361,000	441,100	526,800	618,800	712,600	792,600	854,600
1948	50,000											

12-MONTH MOVING TOTALS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1939												515,000
1940	508,400	514,600	517,700	537,700	541,400	539,600	553,000	557,600	573,600	596,900	596,700	602,500
1941	618,000	624,800	639,000	651,300	665,000	698,100	715,100	729,100	737,700	727,700	729,400	715,200
1942	708,500	716,100	708,600	693,100	683,000	652,100	604,200	561,900	535,300	511,300	495,100	496,600
1943	507,100	495,900	476,200	443,200	416,200	391,700	389,200	389,300	373,200	369,100	364,800	350,000
1944	322,300	295,700	288,000	268,400	251,300	247,000	237,300	222,500	209,500	192,200	177,700	169,000
1945	159,300	154,200	148,400	152,400	152,800	155,600	161,200	165,500	172,100	186,700	205,600	225,000
1946	254,900	288,900	338,600	387,300	437,500	481,300	523,800	572,100	611,800	644,200	661,400	670,500
1947	673,100	674,800	671,200	672,900	678,300	691,400	708,900	729,200	763,600	799,600	831,900	854,600
1948	864,500											

ESTIMATED NUMBER OF NEW NONFARM DWELLING UNITS COMPLETED

NEW PERMANENT UNITS

	Monthly			Cumulative		
1946	Conventional	Factory-Built	Total	Conventional	Factory-Built	Total
July	32,600	4,100	36,700	147,100	18,200	165,300
Aug.	39,500	3,900	43,400	186,600	22,100	208,700
Sept.	45,900	3,800	49,700	232,500	25,900	258,400
Oct.	50,600	4,900	55,500	283,100	30,800	313,900
Nov.	57,600	3,600	61,200	340,700	34,400	375,100
Dec.	59,900	2,800	62,700	400,600	37,200	437,800
1947						
Jan.	--	--	62,600	--	--	62,600
Feb.	--	--	60,300	--	--	122,900
Mar.	--	--	57,700	--	--	180,600
Apr.	--	--	59,500	--	--	240,100
May	--	--	59,900	--	--	300,000
June	--	--	63,000	--	--	363,000
July	--	--	65,700	--	--	428,700
Aug.	--	--	70,400	--	--	499,100
Sept.	--	--	77,200	--	--	576,300
Oct.	--	--	82,700	--	--	659,000
Nov.	--	--	86,500	--	--	745,500
Dec.	--	--	89,000	--	--	834,500

TEMPORARY RE-USE, CONVERSIONS AND TRAILERS

1946	Monthly	Cumulative
July	13,300	66,300
Aug.	17,200	83,500
Sept.	31,400	114,900
Oct.	30,800	145,700
Nov.	26,600	172,300
Dec.	32,200	204,500
1947		
Jan.	34,800	34,800
Feb.	31,400	66,200
Mar.	29,600	95,800
Apr.	23,100	118,900
May	18,800	137,700
June	11,900	149,600